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## ABSTRACT

This theme issue of the newsletter "Southern Perspectives" contains five articles on labor supply and demand issues in the rural South: "An Overview of Employment Changes in the Nonmetropolitan South" (David L. Barkley) examines nonmetro earnings trends in 16 southern states and employment trends in selected industries in the nonmetro South, 1991-96. Future prospects for rural labor demand are discussed, focusing on internationalization of competition, service sector growth, new production technologies, and industrial restructuring. "Rural-Urban Migration, the Rural Renaissance, and the Rural Rebound in the South" (Mark Nord, John Cromartie) details migration trends in the 1990s for the rural South by age, education, income, and race/ethnicity and finds that immigrants included disproportionately larger shares of young families and high school graduates. "The Geography of New Manufacturing Technology: Implications for the Rural South" (David A. McGranahan) shows that in the 1990s, manufacturing jobs moved out of rural counties with higher high school dropout rates and into rural counties with lower dropout rates. "Underemployment in the South" (Leif Jensen) provides data on rural-urban differences in various types of underemployment in 1998 and in total underemployment in the South by race/ethnicity for 1968-98. "A Profile of Mexican Workers in the Southern Region: A Focus on Nonmetro/Metro Distinctions" (Rogelio Saenz) profiles rural-urban differences in age, income, education, language use, and occupation of Mexican Americans in the South in 1999. (Contains references and data tables.) (SV)

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**Theme  
of this Issue:**

**The Changing  
Complexion  
of the South's  
Rural Labor  
Markets**

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## VIEWS

### from the Director...

#### Theme of this Issue:

#### The Changing Complexion of the South's Rural Labor Markets

There continues to be much debate regarding the capacity of America's workforce to meet employer demands for more educated, technologically sophisticated, and multi-skilled workers. While brisk job growth is projected to occur among occupations requiring people with education beyond high school, there is little doubt that low-skilled, low-wage jobs will remain accessible to those with limited education or minimal work-related experiences.

For those with an active interest in the rural South, the questions remain, "What is the prognosis for rural people and communities in this region?" Does their economic future appear bleak, or are they positioned to become full partners in the economic expansion of our region and nation? More importantly, is there any hope that the rural South will succeed in capturing jobs that demand more highly-skilled workers? And if so, will there be sufficient pools of educated workers available in the rural South to move into these jobs?"

These are the central issues that prompted four rural development entities — the University of Kentucky TVA Rural Studies Program, the Farm Foundation, the Economic Research Service/USDA, and the Southern Rural Development Center — to gather a multi-disciplinary group of rural development experts to take a hard look at rural labor market demand and supply issues in the rural South. This issue of *Southern Perspectives* highlights a subset of works presented over the course of the two-day meeting held last October in New Orleans.

We want to extend our appreciation to David Freshwater and Tim Wojan (UK/TVA Rural Studies Program), David McGranahan (ERS), Walt Armbruster and Steve Halbrook (Farm Foundation) for teaming up with the SRDC in addressing this important topic.

Bo Beaulieu  
Director

### An overview of employment changes in the nonmetropolitan South

David L. Barkley

A goal shared by nonmetropolitan communities throughout the South is the expansion of local employment opportunities. [a] Community leaders view job growth as a means of retaining young families and high school and college graduates, increasing the local tax base and improving public services, expanding commercial activity and revitalizing "main street," and enhancing the overall local quality of life. The perceived benefits associated with local employment gains often overstate the actual impacts. Yet the benefits have been sufficiently large and visible to encourage the allocation of significant resources to employment generation strategies such as industrial recruitment, small business development, tourism and retirement promotion, and enhancements in agriculture.

Nonmetropolitan areas of the South, on the whole, have been rewarded for their efforts to expand and improve employment opportunities. During the

1990s, the rate of employment growth in the rural South exceeded the national growth rate. But relatively rapid employment growth in the rural South obscures two weaknesses in the region's demand for labor. First, the Southern nonmetro employment growth experience is highly varied, with slow growth or job losses continuing to be the norm for many counties in the region. Second, the average growth of earnings per worker for Southern nonmetro employees lags the national average; thus, the earnings differential between the rural South and the remainder of the nation continues to widen.

The purpose of this article is to summarize recent employment and earnings trends in the nonmetro South and review changes in the competitive environment that may impact future employment opportunities and earnings for rural workers. The new competitive environment is characterized by greater global competition, a continuing shift from goods-producing to service-producing industries, new

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production organizations and technologies, and industrial restructuring. The implications of these structural changes for nonmetropolitan businesses and workers are summarized after an overview of recent trends.

### Employment and earnings trends in the nonmetro South

Since the 1989-1990 recession, the United States economy has experienced a period of sustained growth in employment and nominal earnings per worker, and workers in the nonmetro South benefited from this "rising tide" of economic activity. From 1991 to 1996, employment in nonmetro areas of the 16 Southern states increased by approximately 1,019,000 jobs (10.2 percent) and average nominal wages per worker increased from \$17,948 to \$20,945 (16.7 percent). For the nation as a whole, employment increased by 9.7 percent and average wages per job by 17.6 percent from 1991 to 1996. Thus nonmetro areas in the South created jobs at a more rapid rate than the nation, but the wage differential between Southern nonmetro workers and the nation as a whole increased during the 1990s.

The aggregate employment and wage statistics disguise much variability that exists within the nonmetro South by major industry divisions and by nonmetro county location, size, and employment base (see Table 1).

Farm employment declined at similar rates (approximately 5 percent) in the nonmetro South as the remainder of the nation. And employment in mining and in the military declined significantly in the rural South as elsewhere in the U.S.

Federal civilian employment in the rural South also fell from 1991 to 1996, but only by 1,681 workers or -1.2 percent. Employment loss rates in this sector were significantly larger for the nonmetro U.S. (-5.6

**Table 1. Nonmetropolitan employment in selected industries in the South, 1991-1996**

Industry	Nonmetro Employment 1991	Nonmetro Employment 1996	Employment Change 1991-1996
<b>A. FARM EMPLOYMENT</b>	779,166	740,432	-38,734
<b>B. NONFARM EMPLOYMENT</b>	9,247,805	10,305,680	1,057,975
<b>1. Private Employment</b>	7,506,766	8,440,385	933,619
Ag. Serv., Forestry, Fishing and Other	113,934	151,137	37,203
Mining	198,497	161,479	-37,018
Construction	511,503	628,039	116,536
Manufacturing	2,033,624	2,118,784	85,160
Transportation and Public Utilities	390,986	417,542	26,556
Wholesale Trade	304,612	331,272	26,660
Retail Trade	1,571,404	1,847,663	276,259
Finance, Insurance, and Real Estate	434,422	465,481	31,059
Services	1,947,784	2,318,988	371,204
<b>2. Government and Government Enterprises</b>	1,741,039	1,865,295	124,256
Federal, Civilian	141,679	139,998	-1,681
Military	211,467	184,843	-26,624
State	407,028	450,772	43,744
Local	980,865	1,089,682	108,817
<b>Total Employment</b>	<b>10,026,971</b>	<b>11,046,112</b>	<b>1,019,141</b>

Source: Bureau of Economic Analysis, *Regional Accounts Data, County Wage and Salary Summary CA-34*, 1969-96.

percent) and the nation as a whole (-7.7 percent).

The largest net employment gains for the nonmetro South occurred in services (371,204), retail trade (276,259), construction (116,536), local government (108,817), and manufacturing (85,160). Southern nonmetropolitan employment growth rates in services (19.1 percent), retail trade (17.6 percent), and local government (11.1 percent) exceeded the sectors' growth rates reported for the U.S. and other nonmetro areas.

Employment growth rates for Southern nonmetropolitan manufacturing (4.2 percent) and construction (22.8 percent) industries, on the other hand, were lower than those for other nonmetro areas.

In summary, both the goods-producing (agriculture, forestry, fishing, mining, construction, and manufacturing) and the service-producing (services; trade; government; transportation and public utilities; and finance, insurance, and real estate) sectors contributed to Southern nonmetro employment growth from 1991 to 1996. However, net employment change in the service-producing industries contributed 84 percent of the new jobs while only 16 percent were provided by net employment change in the goods-producing sectors.

**EARNINGS AND EMPLOYMENT BY STATE.** As Table 2 shows, all Southern states exhibited nonmetro employment gains in the 1990s, though only eight of the states exceeded the national average growth rate of 9.7 percent (Arkansas, Delaware, Florida, Georgia, Mississippi, North Carolina, Tennessee, and Texas), and only four Southern states exceeded the nonmetro U. S. average growth rate of 10.9 percent (Florida, Georgia, Mississippi, and North Carolina).

From 1991 to 1996, net employment change in the service-producing industries contributed 84 percent of the new jobs while only 16 percent were provided by net employment change in the goods-producing sectors.

Average earnings per job increased by 17.6 percent for the nation and 16.3 percent for U.S. nonmetropolitan areas. Only five states in the South (Alabama, Georgia, North Carolina, South Carolina, and Tennessee) reported nonmetro average wage growth rates greater than the national averages (see Table 3). And only seven Southern states (the above five plus Arkansas and Florida) had percentage increases in average earnings greater than the national nonmetro rate. Growth in nonmetro earnings in the remaining eight Southern states lagged the national averages, resulting in a greater earnings gap in 1996 than in 1991.

### Future prospects for labor demand

The economic environment facing the nonmetro South is characterized by continued growth in service-related activities as sources of employment, the rapid adoption of new technologies and production organizations, corporate restructuring and industry clustering, and enhanced competition resulting from the globalization of markets. The implications of these changes for rural communities in the South appear mixed, depending on the communities' abilities to adapt to and take advantage of the new opportunities.

**INTERNATIONALIZATION OF COMPETITION.** The internationalization of markets for goods and services and intensification of global competition will present both positive and negative impacts on rural producers and labor demand. On the positive side, new markets are available to rural firms, and Southern producers that are competitive in these markets may benefit local labor markets through expanded employment opportunities and higher wages.

On the negative side, an expansion of international trade will render some nonmetro firms susceptible to import penetration from producers in low-wage countries. Rural industries reliant on unskilled labor, standardized products, and routinized production processes will be most susceptible to imports from low-wage countries.

**Table 2. Nonmetropolitan employment change in Southern states, 1991-1996**

Industry	Nonmetro South (%Change)	Nonmetro U.S. (%Change)	U.S. Total (%Change)
<b>A. FARM EMPLOYMENT</b>	-5.0%	-5.3%	-5.1%
<b>B. NONFARM EMPLOYMENT</b>	11.4	12.2	0.1
<b>1. Private Employment</b>	12.6	13.8	11.6
Ag. Serv., Forestry, Fishing, and Other	32.7	21.9	24.8
Mining	-18.6	-14.7	-13.9
Construction	22.8	25.6	19.2
Manufacturing	4.2	7.2	1.1
Transportation and Public Utilities	6.8	9.4	9.6
Wholesale Trade	8.8	7.0	5.8
Retail Trade	17.6	16.5	12.9
Finance, Insurance, and Real Estate	7.1	14.7	7.2
Services	19.1	17.4	17.2
<b>2. Government and Government Enterprises</b>	7.1	5.3	2.1
Federal, Civilian	-1.2	-5.6	-7.7
Military	-12.6	-16.6	-15.9
State	10.7	8.1	6.6
Local	11.1	10.3	7.4
<b>Total Employment</b>	10.2	10.9	9.7

Source: Bureau of Economic Analysis, *Regional Accounts Data, County Wage and Salary Summary CA-34*, 1969-96.

**SERVICE SECTOR GROWTH.** The expansion of service-producing industries relative to the goods-producing sector raises two concerns relative to the impact on Southern nonmetro labor markets. First, will nonmetro areas in the South be attractive locations for firms in the service sector as they traditionally have been for manufacturing establishments? It is not clear whether the expanding service sector will create employment opportunities in the rural South to the extent these jobs are created elsewhere.

Second, will the shift to service-related activities negatively impact the earnings potential of rural residents? Anecdotal evidence of displaced factory workers flipping hamburgers suggest that employment in the service sector is often a poor substitute for manufacturing jobs. Recent research on this issue is, however, mixed. Kozicki [3] notes that the gap between manufacturing and service productivity is widening because of lagging computerization of service industries and differences in competitive pressures. Lagging service

sector productivity may slow earnings growth among service providers relative to employees in the goods-producing industries. And Marshall and Wood [4] suggest that the relatively high wage, high skill producer services will concentrate in urban areas due to their orientation toward key producer markets and reliance on diverse labor skills.

On the other hand, Beyers [1] finds that employment growth in producer services is strong in rural areas with high quality of life, proximity to clients, and attractive transportation and telecommunications infrastructure. Moreover, Dupuy and Schweitzer [2] show that a wide range of high paying jobs are available in the service sector; and, overall, the wage gap between goods- and service-producing jobs is negligible. The authors note, however, that the goods-producing industries do offer better earnings prospects for those with a high school degree or less, a segment of the labor force that is disproportionately represented in the rural South.



**PRODUCTION TECHNOLOGY AND ORGANIZATIONS.** Robotics, computer-aided design (CAD), computer-aided manufacturing (CAM), computerized sorting and handling, just-in-time (JIT) inventory replacement, flexible machining cells, and flexible labor cells are examples of innovative cost-reducing technologies and production practices adopted to enhance international competitiveness. The implementation of "high performance production systems" will negatively impact the demand for rural labor if: (1) rural manufacturers are slow to adopt the new technologies, and as a result, become less competitive in the global economy; (2) the adoption of new technologies and organizations by rural producers eliminates jobs at rural manufacturing facilities; or (3) increased labor-skill requirements reduce manufacturers' propensities to decentralize to rural areas.

**INDUSTRIAL RESTRUCTURING.** The globalization of competition and innovations in production technologies and management practices encourage a restructuring of manufacturing and service activities from large-scale, multi-plant, vertically integrated operations to smaller, more specialized firms. The restructuring of manufacturing activity may have adverse implications for nonmetropolitan communities in the South if the nonmetro areas are perceived to be less attractive locations for manufacturers or the smaller, more specialized firms provide lower earnings potentials.

### Implications

The current economic environment (internationalization of markets, innovative production technologies and practices, industrial restructuring, and continued structural shift to service-producing industries) presents challenges to Southern nonmetro areas. The implications of these challenges for labor demand in rural labor markets will vary markedly depending on local characteristics and history and indigenous responses to the challenges.

For example, greater international trade will benefit rural areas whose firms are capital or skilled-labor intensive but negatively impact areas whose producers

**Table 3. Average wage per job, full and part-time employees by place of work, nonmetro counties in the South, 1991-1996**

State	Average Wage Per Job		1991 to 1996 % Change
	1991	1996	
Alabama	\$17,291	\$20,530	18.7%
Arkansas	16,601	19,323	16.4
Delaware	18,243	20,962	14.9
Florida	17,709	20,622	16.4
Georgia	17,884	21,127	18.1
Kentucky	18,510	21,524	16.3
Louisiana	18,209	20,854	14.5
Maryland	19,712	22,844	15.9
Mississippi	17,730	19,956	12.6
North Carolina	17,699	20,977	18.5
Oklahoma	17,829	19,688	10.4
South Carolina	18,293	21,989	20.2
Tennessee	18,348	22,212	21.1
Texas	17,965	20,523	14.2
Virginia	18,430	21,146	14.7
West Virginia	20,150	22,244	10.4
<i>Nonmetro South</i>	17,948	20,945	16.7
<i>Nonmetro U.S.</i>	18,496	21,510	16.3
<b>U.S. TOTAL</b>	<b>\$24,216</b>	<b>\$28,483</b>	<b>17.6</b>

Source: Bureau of Economic Analysis, *Regional Accounts Data, County Wage and Salary Summary CA-34, 1969-96.*

compete with imports from low-wage countries. The growth in service-producing industries favorably impacts rural communities that are able to attract and support export oriented services and service industries employing well-educated labor. And the adoption of "high performance production systems" and the restructuring of industry to smaller, more specialized firms are occurring in rural areas where skilled labor is available, industry clustering is present, and the perceived quality of life is high.

On the other hand, Southern rural areas with a legacy of low-skill, low-wage activities will be at a competitive disadvantage in attracting or developing the more rapidly growing, higher-skilled service and manufacturing activities. These rural communities may respond to the enhanced competitive pressures by taking the "low

road" approach of further reducing local production costs through tax abatements, lax environmental regulations, and downward pressure on wages. Or competitiveness may be improved by the "high road" approach of raising worker productivity through education and training, developing institutions for technology transfers and business assistance, and improving public infrastructure and services.

### Endnotes

[a] Throughout this article, rural and nonmetro are used interchangeably to refer to Nonmetropolitan Statistical Areas, and urban and metro will both refer to Metropolitan Statistical Areas. The South is defined as the 16 state region in the South census division (Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Mississippi, Alabama, Arkansas, Louisiana, Texas, and Oklahoma).

*continued on page 7*

## Rural-urban migration, the rural renaissance, and the rural rebound in the South

Mark Nord and John Cromartie

Nonmetro America, after many decades of net outmigration, experienced a migration turnaround in the 1970s. Annual net migration to rural areas reached one percent by mid-decade. A small share of this was international immigration, but the large majority resulted from net exchange with metropolitan areas. This "rural renaissance" was short-lived, however, lasting just over a decade. During most of the 1980s, net migration again favored metro areas of the U.S. at the expense of nonmetro areas. But then migration to nonmetro areas rebounded in the 1990s. In the first six years of the decade, metro-to-nonmetro migrants outnumbered the reverse stream by 1.6 million people, and an additional 227 thousand immigrants moved into nonmetro areas from other countries. [a]

The nonmetro South got its fair share of these migrants. From 1990 to 1996, the nonmetro South gained 733,000 residents through migration exchange with the metro South and with other regions—a six-year net domestic migration rate of 3.2

percent (see Figure 1)—as well as 97 thousand international immigrants. Only the nonmetro West had a higher net migration rate. This was in sharp contrast with the last half of the 1980s, when net domestic migration to the nonmetro South was negligible. Current Population Survey (CPS) data confirm that net migration to the nonmetro South has remained substantial into the last half of the 1990s. In the two-year period ending in March 1997, average annual net domestic migration to the nonmetro South was 1.4 percent per year, equalling or surpassing that of the nonmetro West. This represented a net gain for the nonmetro South of more than 300,000 people per year. [b]

### Who are they? Age, education, and income of immigrants to the nonmetro South

We now examine the characteristics of migrants to and from the nonmetro South for the two-year period ending in March 1997, the most recent year for which Current Population Survey data are available. Two-year averages are presented because

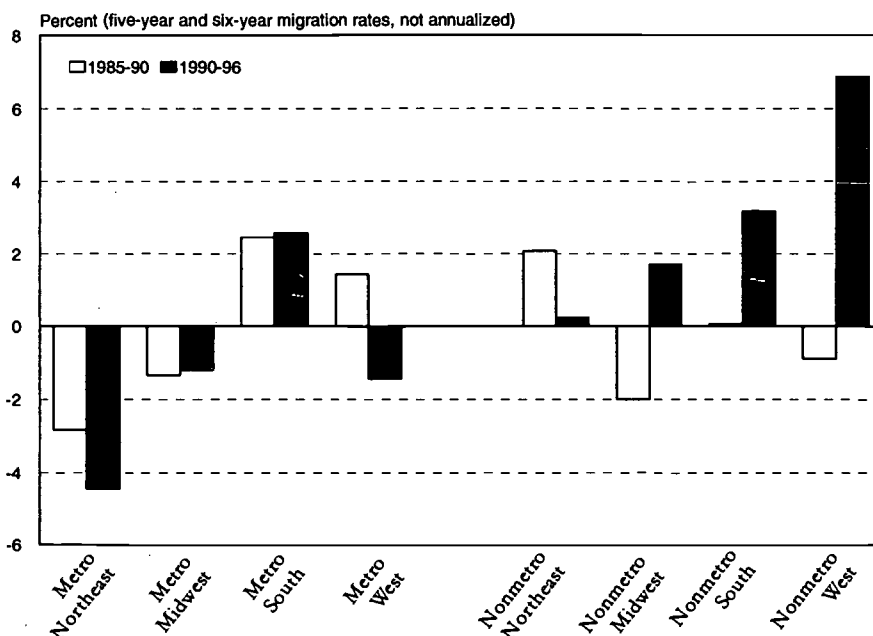
the size of the survey does not assure adequately reliable estimates for a single year for some population groups.

During the two-year period, 14 percent of residents in the nonmetro South moved each year (see Table 1). Mobility was highest in the post-high school (age 18-25) and early career (age 26-30) stages, when more than one person in four moved each year. Mobility during these stages of life is important for the development of human capital as people move to further their education and to explore and respond to job opportunities. Somewhat more than half of the moves in these age groups were within the same county, but even some of those moves represented changes of employment or educational pursuit, as did most of the moves among counties within the region and to other regions and metro areas.

Net movement into the nonmetro South was highest for persons in the early career stage (age 26-30) and for children. Both age groups gained 2.6 percent per year. This combination indicates that young families were well represented in the migration into the nonmetro South. In the immediate post-high school period (age 18-25), migration both into and out of the nonmetro South was high, but net migration was quite small (0.7 percent per year). This is not surprising because many young people move to cities or suburban areas to attend college after completing high school.

Mobility and net migration were both lower, although still substantial, in middle- and late-career stages. In the nonmetro South, 5.9 percent of persons age 31-40 and 2.5 percent of persons age 41-64 moved across county lines each year. Net migration rates were 0.5 percent and 1.3 percent, respectively. Mobility was lowest in retirement years with 3.6 percent of persons moving annually, and the net gain of retirees by the nonmetro South was only 0.4 percent.

**Figure 1. Net domestic migration rates by region and residence, 1985-90 and 1990-96**



**Table 1. Proportion on nonmetro South residents who moved, annual average, 1995-97**

	Age						
	1-17	18-25	26-30	31-40	41-64	65+	All ages
	----- percent -----						
<b>TOTAL MOBILITY<sup>1</sup></b>	17.3	26.9	26.0	16.0	7.2	3.6	13.9
Moved within same county	12.2	16.6	16.4	10.1	4.7	2.0	9.1
Moved between counties within nonmetro South	2.3	4.3	3.9	2.0	1.2	.7	2.0
Moved out of nonmetro South	2.7	5.9	5.6	3.9	1.3	.9	2.8
<b>MOVED INTO THE NONMETRO SOUTH</b>	5.3	6.6	8.2	4.3	2.6	1.3	4.2
<b>NET MIGRATION TO THE NONMETRO SOUTH</b>	2.6	.7	2.6	.5	1.3	.4	1.4

Note: Components of total mobility and net migration may not sum to total due to rounding errors.

<sup>1</sup>Total mobility is the percent of residents who moved during the year, whether within the same county, between nonmetro counties in the South, or out of the nonmetro South.

Source: Prepared by ERS using data from March 1996 and March 1997 Current Population Surveys.

In the early 1990s, for the first time in many years, more college-educated people migrated into than out of nonmetro areas. [1] This pattern continued and strengthened in the mid 1990's. [3] Net nonmetro immigration of persons with a college degree increased from under one half percent per year in the early 1990s to about one percent per year in 1996 and 1997, essentially the same as net migration rates for less educated people. This was less true in the nonmetro South than in other nonmetro areas, however. Although net migration of college-educated persons to the nonmetro South was positive during the 1995-1997 period, it was lower than the rate for the total population (see Table 2), whereas the opposite was true in nonmetro areas of the other three regions. [3] Still, the nonmetro South gained high school graduates at a higher net rate than high school dropouts, and college graduates at a rate similar to that of high school dropouts. This is good news for the nonmetro South and represents an end to the "brain drain" of earlier decades, if not yet a reversal.

Comparing migration rates across income categories gives a picture somewhat at odds with the comparison of education categories. The highest net migration rates were for the poor (1.5 percent) and for those with income just above the poverty line

(2.6 percent). For high-income households, those with income higher than four times the poverty line, the net migration rate was slightly negative. The nonmetro South already had a disproportionate share of poor and near-poor households, [2] and this pattern was reinforced by the income-specific migration just described. It should

be noted, however, that this migration pattern reflects, to some extent, the immigration of young families with their generally lower incomes. [c]

Net migration of Hispanics to the nonmetro South was substantially higher than that of non-Hispanic whites and blacks. This, combined with their higher rate of natural increase, makes Hispanics the fastest-growing racial/ethnic group in the nonmetro South. Currently Hispanics make up 6 percent of the population and blacks 19 percent.

### Where do they go?

#### The importance of urban proximity

During the 1980s, migration was rather strongly organized around metropolitan centers and smaller nonmetropolitan cities. Net domestic migration from 1985 to 1990 was highest in nonmetro counties adjacent to metro areas, and for those not adjacent to metro areas, net migration was highest in counties with larger urban populations (see Figure 2). [c] The two most rural categories registered net outmigration over the period. In the 1990s this urban-centered pattern weakened.

**Table 2. Characteristics of migrants to and from the nonmetropolitan South, annual average, 1995-97**

Characteristic	Domestic immigration rate	Domestic outmigration rate	Net domestic migration rate	International immigration rate
	----- percent -----			
<b>TOTAL</b>	4.2	2.8	1.4	.1
<b>AGE:</b>				
1-17	5.3	2.7	2.6	.2
18-25	6.6	5.9	.7	.3
26-30	8.2	5.6	2.6	.2
31-40	4.3	3.9	.5	.2
41-64	2.6	1.3	1.3	.1
65+	1.3	.9	.4	0.0
<b>EDUCATION (AGES 25 AND OVER):</b>				
Less than high school graduation	2.4	1.5	.9	.1
High school graduation or GED	3.5	2.0	1.5	.1
Some college, less than bachelor	3.7	3.1	.6	0.0
Bachelor degree or more	4.8	4.1	.7	.1
<b>INCOME:</b>				
Below poverty line	5.3	3.8	1.5	.3
1-2 times poverty line	5.0	2.4	2.6	.2
2-3 times poverty line	3.7	2.4	1.3	0.0
3-4 times poverty line	3.2	2.1	1.2	0.0
Above 4 times poverty line	2.9	3.2	-.3	.1
<b>RACE AND ETHNICITY:</b>				
White non-Hispanic	4.3	2.9	1.4	0.0
Black	3.0	2.3	.7	0.0
Hispanic	6.5	2.3	4.2	1.2

Note: Components of net migration may not sum to total due to rounding errors.



From 1990 to 1996, the nonmetro South gained 733,000 residents through migration exchange with the metro South and with other regions

Although net domestic migration remained higher in counties adjacent to metro areas than in those not adjacent, it increased rather sharply with increasing rurality in both adjacency groups. It was highest for fully rural counties adjacent to metro areas (6.6 percent). Even the most remote nonmetro counties, those not adjacent to metro areas and with no urban population at all, registered net migration of nearly 3 percent from 1990 to 1996, a rate higher than any other non-adjacent category.

### Summary

Migration trends in the 1990s are quite positive for the nonmetro South as a whole. The net immigrants represent a gain especially of people in their early career years and include a disproportionate share of young families. The "brain drain" that characterized the 1980s has at least slowed, and possibly stopped. Net migration of high school graduates to the nonmetro

South now exceeds that of high school dropouts, and net migration of college graduates is at a rate similar to that of high school dropouts.

Migration gains in the nonmetro South extend across the rural-urban continuum. Although net gains are greatest in counties adjacent to metropolitan areas, gains are substantial in non-adjacent counties as well. Further, within adjacency categories, less urbanized counties are experiencing higher rates of net migration. Although over one fourth of the counties in the nonmetro South continued to experience outmigration, the rate of outmigration has slowed.

### Endnotes

[a] All migration statistics for the period 1990-1996 are based on the U.S. Bureau of the Census County Population Estimates File, 1996.

[b] Figure 3 represents only domestic migration. International immigration is not included because it is partially offset by an unknown amount of international outmigration. Unlike the county population

estimates, CPS data does not represent international outmigrants because it is a survey of U.S. households. This does not distort the nonmetro estimates too much, since a relatively small share of international immigrants settle initially in nonmetro areas. But for metro areas, looking only at domestic migration gives a very misleading picture of the overall effects of migration. It is known from other data sources that net international immigration to metro areas more than offsets domestic outmigration to non-metro areas.

[c] A further factor biases the association of migration and income. Income measured during the year of a move tends to be lower than income the previous and following years. Thus, migrants have, on average, lower measured income than nonmigrants with otherwise similar characteristics. Where net migration is positive, as it is in the nonmetro South during the period under study here, this biases the net migration of lower-income categories upward.

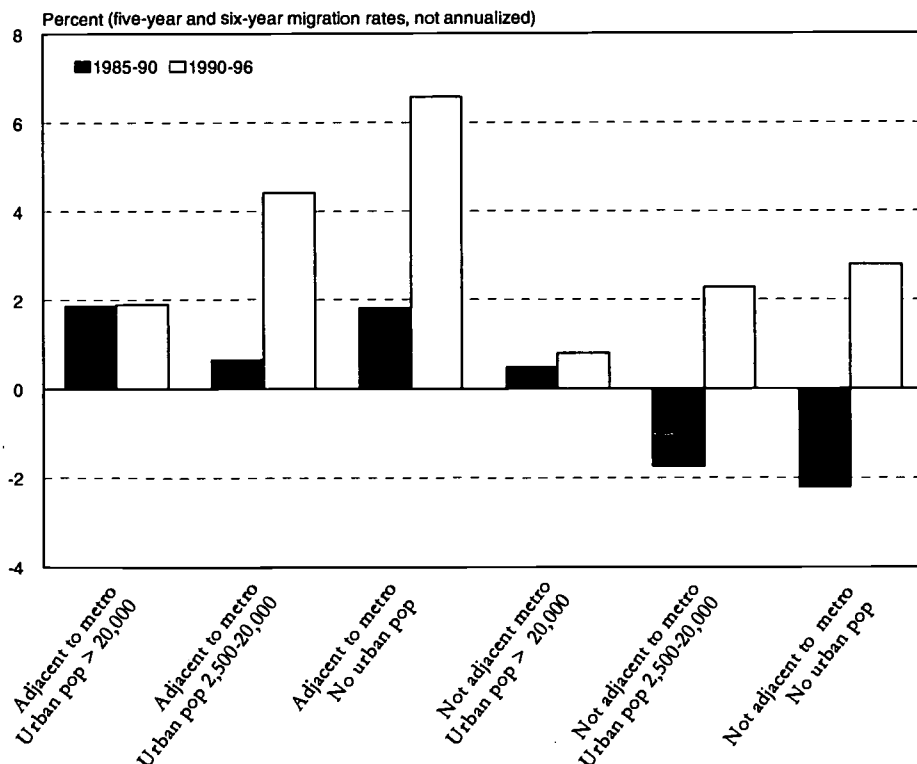
[d] Migration rates for categories of counties throughout the article are calculated for the total populations and total net migrants of counties in the categories. Thus, they are true category migration rates, and correspond to population-weighted means of county rates.

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**Figure 1. Net domestic migration in the nonmetro South by metropolitan proximity and extent of urbanization, 1985-90 and 1990-96**



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## The geography of new manufacturing technology: Implications for the rural South

David A. McGranahan

Employment in the rural South has expanded considerably over the past several decades. From at least 1960 through 1990, employment in the rural South grew at above the rural U.S. average and, during the 1970s, at a rate above the U.S. average. While retirement and recreation were responsible for growth in selected areas, the growth engine for much of the rural South was manufacturing. This has made the rural South the region most dependent on manufacturing. In 1995, nearly 20 percent of the jobs in the rural South were manufacturing jobs, far more than in the rest of rural America (15 percent) or in the urban (metropolitan) South (10 percent).

These employment data actually underestimate the importance of manufacturing. Manufacturing jobs generally pay higher wages than other jobs and are more often full-time, especially compared to service-sector jobs. Thus, manufacturing was directly responsible for more than 25 percent of total earnings in the rural South in 1995. And, it indirectly generated a substantial fraction of service sector earnings.

The central attraction of the rural South—and other rural areas—has been low cost labor. The “product cycle” theory (and its variants) has provided the geographic logic for understanding industrial relocation to the region. The essence of this model is that as industries mature, production technology becomes routine, markets stabilize, price competition replaces product quality competition, access to ideas, information and skilled labor become less critical, and manufacturing in low-skill, low-wage areas becomes more competitive. The relocation process is facilitated by the organizational separation of manufacturing activities into headquarters and branch plants, which allows the location of more routine activities in peripheral locations while keeping more complex managerial and research activities in central locations. [a]

In the past 10 years, spurred by globalization and the development of microprocessors, the product cycle has been turned on its head. Markets have become less certain, product competition has increased, and new technologies have evolved. The wave of innovation has involved most aspects of manufacturing—production, marketing, work organization, inter-firm relations, and inventory management—and all types of manufacturing, if in varying degrees. [1] The greater uncertainty suggests that skills have regained importance and advanced technology manufacturers may be shifting out of low-skill, low-education rural areas, toward more urban locations.

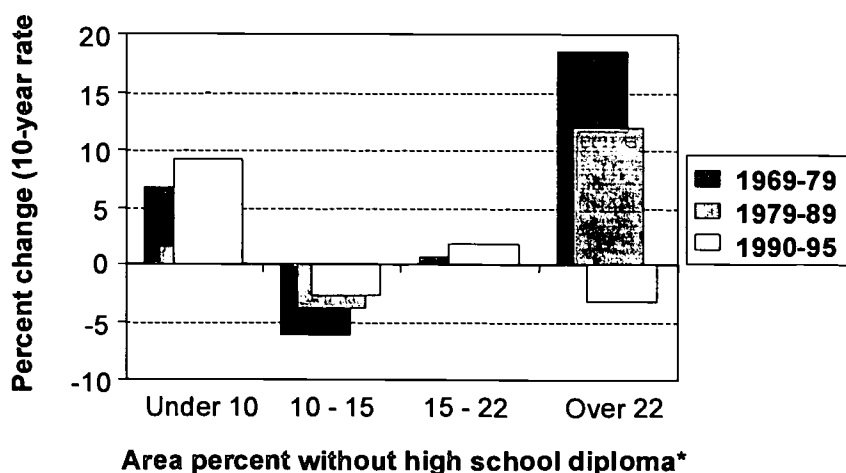
In this article, we present evidence that the geography of manufacturing location has changed dramatically in the 1990s, consistent with the new technology-globalization scenario outlined above and in marked contrast to earlier decades. The data for this article are drawn from the BEA county level earnings and employment files, which allow an examination of the changing location of manufacturing.

### Changes in the location of manufacturing

Evidence that a substantial shift in the location of manufacturing jobs has occurred is quite strong both at the national level and in the rural South. For the national level analysis, we used local labor market areas (“commuting zones”) developed by Tolbert and Killian [3] as the units of analysis. For the periods 1969-79, 1980-89, and 1990-95, we calculated expected manufacturing employment change for each labor market area based on its two-digit SIC manufacturing employment in the base year and the national growth rates of these 20 two-digit industries. The difference between the actual growth and the expected growth represents the estimated shift in manufacturing jobs across labor market areas. We then classified the areas according to the proportion of population aged 25-44 that lacked a high school diploma (or equivalent) in 1990 and, for each education category, estimated the percent change in manufacturing employment due to shifts in employment from other categories.

The results of this analysis show considerable changes in the movement of manufacturing over time (Figure 1). In

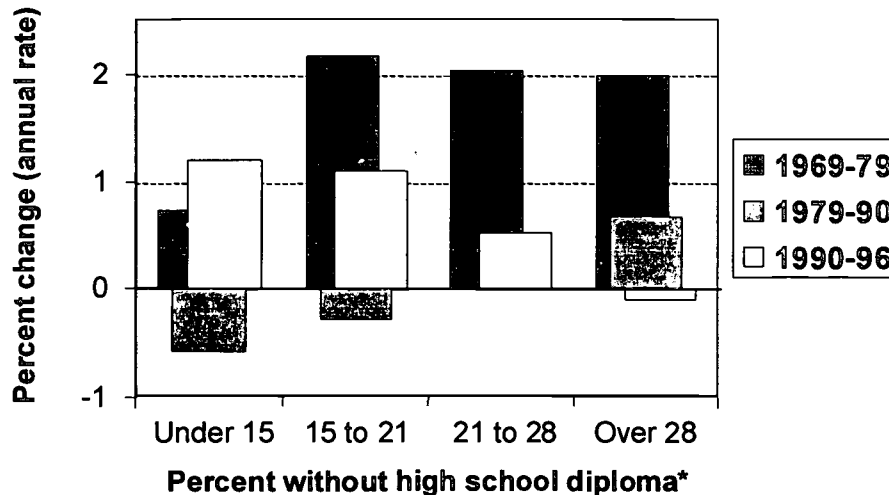
Figure 1. Local labor market area changes in manufacturing jobs due to shifts among areas



\*Ages 25-44, 1990

Source: ERS; based on BEA data files.

**Figure 2. Change in rural manufacturing jobs in the South by county education level**



\*Ages 24-44, 1990

Source: ERS, based on BEA data files.

1969-79, a period when manufacturing employment was expanding nationally (by about 5 percent), the shift was out of the second highest education category to the highest and, especially, lowest categories. Overall, this pattern of shifts persisted in the 1980s, although somewhat reduced in intensity. While this was a period of restructuring due to intense competition from abroad, there is no evidence of a change in locational strategy. The low education areas were actually the only ones to gain in manufacturing over the 1980s (4 percent).

The pattern of employment shifts in the early 1990s was, however, markedly different. The shift to the highest education areas intensified, but, more significantly, manufacturing shifted out of low education areas. These employment shifts suggest that these areas are less attractive in an era of new technology.

Change in technology may not be the entire explanation. There are still manufacturers pursuing low skill/low wage strategies, but these strategies may now be taking them to low wage countries abroad to a greater extent than in the past. Among those that remain, however, the low road strategy is apparently no longer seen as effective as it was in the past.

A very similar pattern emerges when we look at simple changes in manufacturing employment in rural Southern counties (Figure 2). In 1969-79, manufacturing grew rapidly in all except the highest education counties in the South. (The category demarcations are all at somewhat higher dropout rates than in the previous figure, because few Southern counties are high education counties by national standards.) In 1980-89, manufacturing expanded only in the lowest education counties, suggesting that the low road strategy was the first one emphasized in the face of international competition. However, the pattern was reversed in 1990-96, when the highest education counties in the South were the ones that expanded manufacturing employment the most and the lowest education counties lost manufacturing jobs. Again, the pattern is consistent with the thesis that new technologies are raising the skill needs of rural manufacturers.

It is important to note that these findings are generalizations and do not pertain to all counties or regions in the South. For instance, a very high proportion of Southern Appalachia's young adults (ages 25-44) did not have a high school diploma in 1990, yet manufacturing grew in these counties irrespective of the local education

levels. Thus, at least for the moment, the low road strategy appears to be viable in some low education areas of the rural South.

### Implications for policy

In the past, manufacturing shifted to the rural South—and other rural areas as well—largely in a search for low cost labor, with labor skills a very secondary issue. This was due in part to the fact that manufacturers felt they had little to gain from improvements in local schools and training institutions.

New technology has weakened, if not eliminated, this logic for an increasing proportion of manufacturers, creating both risks and opportunities. The central risk is that manufacturers will avoid rural areas with extremely low education levels or, if they are already there, move away, thus depriving these areas of a long-term source of new jobs and exacerbating inequality between rich and poor regions. The 1990s has seen at least a temporary cessation in the shift of manufacturing to low education areas. This could create long-run problems for low education areas, especially since welfare reform seems likely to generate a growth in the low-skill labor force precisely in these areas. Manufacturing jobs in low-education counties, although paying relatively little compared to manufacturing jobs in other areas, are still relatively good jobs in these counties and generate income and other jobs in the community.

The spread of new technologies also creates new opportunities. To the extent that manufacturers in low education areas move to adopt new technologies and seek to develop a greater stake in the effectiveness of local schools and training systems, they set the stage for producing a more skilled supply of labor and improving the community as a place for all of their employees to live.

### Endnotes

[a] For an excellent summary of the "product cycle," see Malecki. [2]

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## Underemployment in the South

Leif Jensen

Underemployment—being out of a job but looking for work—is only one way to measure employment hardship among individuals, and it does not capture the full range of employment hardship. How about those who would like a job but because they have given up trying to find one, are technically not in the labor force and therefore ignored in calculations of unemployment rates? Others might be working part-time involuntarily, that is, only because their employer cannot employ them full time. Finally, still others might be working full time, but not earning enough to bring them much above the poverty line. Taken together, people enduring these various forms of employment hardship can be regarded as *underemployed*.

The Labor Utilization Framework (LUF) framework was developed by Philip Hauser, and later elaborated by Clifford Clogg, as a way to use survey data to identify the following types of underemployed workers. The *sub-unemployed* or *discouraged workers* are those adults who are not working, are not currently looking for work, but who nonetheless would like to be working if they could find a job. The

If Southern workers suffer any unique disadvantage, it is that they have the highest percentage who are underemployed by low income, i.e. working poor (6.92 percent). This is consistent with the lower wages known to characterize Southern employment.

*unemployed* are those who are not working but are actively looking for work, and those who are currently on lay-off. *Involuntary part-time workers* (or those underemployed by *low hours*) are individuals who are working less than full-time hours (35 hours per week) only because they are unable to find full-time work. And finally, the *working poor* (or those underemployed by *low income*), are those whose labor market earnings in the previous year (adjusted for weeks and hours worked) were less than 125 percent of the individual poverty threshold. All other workers are defined as *adequately employed*.

To provide a descriptive portrait of underemployment in the nonmetro South, we analyzed data from several March Current Population Surveys (CPS) spanning the three decades 1968 to 1998. The CPS is a large nationally-representative survey of over 50,000 U.S. households and a princi-

pal source of government employment data. Table 1 shows the distribution of U.S. adults aged 18-64 across LUF categories in 1998. The South differs very little from other regions in the overall prevalence of underemployment. The 18.05 percent of Southerners who are underemployed is very close to the national average (17.98 percent), and falls between that in the Midwest (16.09 percent) and the West (20.43 percent). When looking within types of underemployment, the South has a *below-average* percentage of unemployed and involuntary part-time workers. If Southern workers suffer any unique disadvantage, it is that they have the highest percentage who are underemployed by low income, i.e. working poor (6.92 percent). This is consistent with the lower wages known to characterize southern employment.

Is underemployment worse in rural areas? The next two panels of Table 1 show that while more than one in five (21.65 percent) of all nonmetro American adults are underemployed, closer to one in six (17.18 percent) metro American adults suffer employment hardship, and the nonmetro disadvantage is greater in the South and Midwest than elsewhere. In the South, as in the nation as a whole, much of the nonmetro underemployment disadvantage is due to the higher prevalence of working poverty in nonmetro areas, though a higher prevalence of unemployment also is characteristic of the nonmetro U.S. and South.

How has underemployment changed over time, and are there important differences by where people live or by race? Table 2 focuses exclusively on the South and shows the time trend in the underemployment rate. That these rates tend to rise and fall

**Table 1. Percentage underemployed by region and metro/nonmetro residence, 1998**

	Total	South	Northeast	Midwest	West
--- Total ---					
ADEQUATELY EMPLOYED	82.02	1.95	82.71	83.91	79.57
UNDEREMPLOYED	17.98	18.05	17.29	16.09	20.43
Sub-unemployed	0.80	0.77	0.76	0.70	0.98
Unemployed	4.72	4.26	5.48	4.02	5.54
Low hours	6.32	6.10	5.73	5.70	7.82
Low income	6.14	6.92	5.32	5.67	6.10
--- Nonmetro ---					
ADEQUATELY EMPLOYED	78.35	77.74	80.24	80.03	75.04
UNDEREMPLOYED	21.65	22.26	19.76	19.97	24.96
Sub-unemployed	0.84	1.09	0.47	0.74	0.61
Unemployed	5.25	5.45	5.23	4.31	6.76
Low hours	7.38	6.07	8.84	7.41	10.01
Low income	8.18	9.64	5.22	7.52	7.58
--- Metro ---					
ADEQUATELY EMPLOYED	82.82	83.13	82.96	85.17	80.17
UNDEREMPLOYED	17.18	16.87	17.04	14.83	19.83
Sub-unemployed	0.79	0.69	0.80	0.69	1.03
Unemployed	4.60	3.89	5.53	3.92	5.37
Low hours	6.09	6.11	5.38	5.15	7.52
Low income	5.70	6.18	5.34	5.07	5.90

Source: 1998 March Current Population Survey.



**Table 2. Percentage underemployed (any form) in the South, by year, race/ethnicity and residence**

Year	Total	White	Black	Hispanic	Black/ White Ratio	Hisp./ White Ratio
--- Nonmetro ---						
1968 <sup>a</sup>	24.81	19.53	48.60	na	2.49	na
1973	18.17	14.94	34.22	19.38	2.29	1.30
1978	19.88	16.76	35.09	22.70	2.09	1.35
1983	30.16	26.18	49.16	31.13	1.88	1.19
1988	25.76	20.55	45.07	41.87	2.19	2.04
1993	25.84	22.42	40.79	36.76	1.82	1.64
1998	22.26	19.89	28.68	30.11	1.44	1.51
--- Metro ---						
1968 <sup>a</sup>	16.94	11.00	31.60	na	2.87	na
1973	13.17	10.43	23.10	17.17	2.21	1.65
1978	14.05	10.88	25.04	19.08	2.30	1.75
1983	21.14	16.83	34.07	29.94	2.02	1.78
1988	17.86	14.11	27.44	28.42	1.94	2.01
1993	19.25	14.40	31.59	29.32	2.19	2.04
1998	16.87	13.43	23.46	25.36	1.75	1.89

Source: 1968, 1973, 1983, 1988, 1993, 1998 March Current Population Surveys.

\* Hispanics were not separately identified in the 1998 CPS; the vast majority are likely to be classified as "white" in 1968.

over time only reflects the fact that underemployment rates are sensitive to swings in the state of the economy—they tend to be lower when the economy is strong. Looking at the residential comparison, Table 2 indicates that the higher underemployment rates seen in the nonmetro than metro South in 1998 (Table 1), holds across all years. However, there

is no discernible trend in the relative disadvantage of nonmetro residence.

Race differences feature prominently in the literature on the Southern labor force. A legacy of rigid racial stratification, and a difficult history of action and reaction, naturally gives rise to questions about the magnitude and persistence of racial in-

equality in the region. Is racial/ethnic inequality in underemployment worse in the Southern countryside? Table 2 speaks to this question by showing the ratio of black to white, and Hispanic to white underemployment rates. A higher ratio indicates greater racial or ethnic inequality in underemployment. The results in Table 2 indicate that, if anything, the disadvantages of color are *less* severe in the nonmetro than metro South. While the evidence is far from definitive, the ratios of black to white underemployment rates are lower in the nonmetro than metro South in five of the seven years observed. Likewise, the nonmetro Hispanic/white ratio is lower in five of six years observed. The residence-specific trends in racial/ethnic inequality are roughly similar in nonmetro and metro areas for blacks, and are suggestive of decreasing racial inequality, if not smoothly. From 1973 to 1993 there was a steady increase in the Hispanic/white disparity in the metro South, with some improvement noted between 1993 and 1998. The surge in urban-bound immigration from Latin America could account for some of this increase. The Hispanic/white ratios in the nonmetro South are more volatile, but again are suggestive

*continued on page 13*

## A profile of Mexican workers in the Southern region: A focus on nonmetro/metro distinctions

Rogelio Saenz

Throughout the 20th century employment opportunities in the United States have drawn Mexican immigrants. The massive Mexican immigration to this country has occurred through deliberate policies to attract Mexican immigrants, direct recruitment efforts on the part of American employers, and well-developed social networks linking Mexican-sending and U.S.-receiving communities. [1, 2] Despite the constant nature of immigration throughout much of the century, the settlement of Mexican immigrants has been concentrated in certain parts of the country. The Southwest (comprised of Arizona, California, Colorado, New Mexico, and Texas) has been the primary region where Mexican immigrants

are found, with the Midwest (especially Chicago) representing the second most popular region for Mexican immigrants. Nevertheless, the last few years have witnessed a major shift in the geographic patterns of Mexican immigrants. During this period, Mexican immigrants have made inroads into other regions of the country where persons of Mexican origin have been relatively invisible. One of these regions is the South.

This article uses data from the latest decennial census in an attempt to assess the characteristics of Mexican immigrants in Southern labor markets. Data from the 1990 Public Use Microdata Sample (PUMS) are used to conduct the analysis.

The PUMS represents a 5 percents sample of the nation's populations, making it the most comprehensive data set available to examine demographic and socioeconomic patterns. Although these data are now dated and undoubtedly do not capture the significant flows of Mexican immigrants who have made their way into the region after the census was taken, we use the data to obtain a glimpse of the Mexican immigrant experience in regional labor markets and to serve as a benchmark for future analyses which utilize the 2000 decennial census. As such, given the paucity of research on Mexicans in the South, this analysis can be seen as a reconnaissance of the labor market patterns of Mexican workers in the Southern region prior to



the arrival of the new waves of Mexicans to the region.

### Earnings and education characteristics

Table 1 reveals that a relatively high proportion of Mexican-origin workers in the South live in nonmetro areas. As a whole, nearly 27 percent of Mexican-origin workers in the region lived in nonmetro settings. Immigrant men are the most likely to live in such areas, with three in 10 making their home in a nonmetro location. Mexican-origin women, regardless of nativity status, are the least likely (24 percent) to live in nonmetro areas.

Table 1 also shows the wide variability in the average wage and salary income of Mexican-origin workers in 1989, with the range extending from a low of \$7,935 among immigrant women in nonmetro areas to a high of \$20,210 among native-born Mexican-American men in metro settings. Immigrant women in nonmetro areas earned about 39 cents for every dollar earned by native-born Mexican-American men in metro areas. Consistently, across the four subgroups (immigrant men, immigrant women, native-born men, and native-born women), nonmetro workers earned about four-fifths of the wage and salary income of their respective metro counterparts. For instance, the average income of Mexican immigrant male workers living in nonmetro areas is only 79.4 percent of the average income of Mexican immigrant male workers located in metro areas.

The metro-nonmetro income gap is likely to be explained, in part, by the variations that exist among metro and nonmetro workers on the major variables of interest. Across the nativity-gender subgroups, nonmetro workers, for example, have lower levels of educational attainment compared to their metro peers. The educational gap is particularly severe among immigrants, with immigrant metro workers having proportionately almost twice as many high school graduates as do immigrant nonmetro workers. Three immigrant groups exhibit tremendously low levels of educational attainment. Only 16

**Table 1. Summary statistics representing the characteristics of persons of Mexican-origin in the South by nativity, metro/nonmetro residence, and sex, 1999**

Characteristics	Male		Female		Male		Female	
	Nonmet. Immigr.	Metro Immigr.	Nonmet. Immigr.	Metro Immigr.	Nonmet. Native	Metro Native	Nonmet. Native	Metro Native
<b>AVG. WAGE/SALARY INCOME, 1989</b>	\$10,710	\$13,490	\$7,935	\$9,910	\$16,179	\$20,210	\$10,835	\$13,082
<b>PCT. EDUCATIONAL LVL.</b>								
0 to 8 Years	65.3	53.7	57.7	43.1	17.3	9.8	15.0	8.5
9 to 11 Years	18.8	18.1	18.1	14.9	21.8	18.5	19.1	14.9
High Sch. Grad.	9.2	13.8	8.9	17.1	33.0	29.1	35.1	32.3
Some College	5.3	9.1	10.8	17.0	22.4	27.5	25.4	32.3
College Grad.	1.4	5.4	4.6	7.8	5.4	15.1	5.4	12.0
<b>PCT. LANGUAGE</b>								
Only English	5.3	4.6	8.9	8.0	50.5	50.1	54.6	50.4
Bilingual	43.8	45.0	43.5	51.9	44.8	45.8	42.9	46.8
Only Spanish	50.9	50.4	47.7	40.1	4.7	4.2	2.6	2.9
<b>PCT. MIGRANT, 1985-90</b>	58.2	50.8	47.7	40.4	26.5	39.6	24.1	35.1
<b>PCT. IMMIGR. PERIOD</b>								
Before 1970	9.0	10.0	17.7	21.0	---	---	---	---
1970-79	24.7	27.0	33.9	30.3	---	---	---	---
1980-90	66.4	63.0	48.5	48.7	---	---	---	---
<b>AVG. PCT. MEX. IMMIGRANTS</b>	0.6	0.8	1.7	1.4	0.4	0.5	0.9	0.8
<b>PCT. AGE GROUP</b>								
18-24	33.4	29.3	25.8	22.1	30.8	27.9	23.4	27.5
25-34	37.7	41.1	40.8	36.4	30.0	36.2	33.8	35.3
35-44	18.7	17.5	18.5	23.9	21.3	20.9	26.2	22.9
45-54	6.5	7.2	13.1	12.6	10.5	9.8	11.0	9.4
55+	3.7	4.9	1.9	5.1	7.5	5.3	5.8	4.8
<b>PCT. MARRIED</b>	59.8	59.0	76.2	66.0	58.6	56.2	61.8	58.8
<b>AVG. HOURS WORKED, 1989</b>	1,798.2	1,798.3	1,416.7	1,511.7	1,876.2	1,939.4	1,555.4	1,581.2
<b>AVG. YRS. EXP.</b>	17.8	17.4	18.0	18.7	15.5	14.3	16.6	14.1
<b>OCCUPATION</b>								
White-Collar	5.2	10.8	14.6	34.0	24.1	39.5	44.3	67.1
Blue-Collar	44.8	47.4	36.9	21.2	50.6	41.9	24.3	11.5
Service	6.1	14.0	15.0	26.7	11.4	11.5	24.7	17.2
Farm	44.0	27.8	33.5	18.0	13.9	7.1	6.7	4.2
<b>TOTAL N</b>	969	2,230	260	805	790	2,237	539	1,679

percent of immigrant men in nonmetro areas, 24 percent of immigrant women in nonmetro areas, and 28 percent of immigrant men in metro settings hold a high school diploma.

On the other end of the continuum, more than 70 percent of native-born Mexican-American workers in metro areas are high school graduates.

### Some demographic differences

Among the three subgroups with the lowest educational levels, the majority of workers are monolingual Spanish speakers. By way of contrast, among native-born Mexican-Americans, the majority of workers in each subgroup are monolingual English speakers. Furthermore, among Mexican immigrants, those located in nonmetro areas are more likely to be new to their state of residence (moving into

the state between 1985 and 1990) compared to their metro counterparts, whereas among native-born Mexican-Americans the opposite is the case. Finally, there appears to be little variation across nonmetro and metro workers on two variables of interest—the relative group size of Mexican immigrants in the area and the period of entry into the United States among immigrants. Most Mexican workers live in areas with very few Mexican immigrants, with female immigrants being the group most likely to live alongside co-ethnic immigrants. While there is little variation across metro and nonmetro immigrant groups on time of arrival, immigrant men are more likely to have arrived between 1980 and 1990 than immigrant women.

There are also some noticeable variations across nonmetro and metro workers on several other variables. First, among Mexican immigrant women, those living in nonmetro settings (66.6 percent are younger than 35) tend to be younger than their counterparts living in metro areas (58.5 percent are younger than 35). In contrast, among native-born Mexican-Americans, workers in metro areas tend to be younger than those inhabiting nonmetro areas. It is worth mentioning that upwards of two-thirds of workers in three subgroups are less than 35 years of age: immigrant men in nonmetro areas (71.1 percent), immigrant men in metro areas (70.4 percent), and immigrant women in nonmetro areas (66.6 percent). Second, among immigrant women, those in nonmetro areas (76.2 percent) are more likely to be married compared to their sisters living in metro areas (66.0 percent). Third, with the exception of immigrant men, workers in nonmetro areas tend to have worked fewer hours in 1989 compared to those living in metro places. Fourth, across the four subgroups, nonmetro workers are much more likely to be employed in farm-related occupations while metro workers are more likely to be employed in white-collar

occupations. Nonmetro immigrant workers are especially likely to hold farm-related jobs (men, 44.0 percent; women, 33.5 percent). By way of contrast, relatively few native-born Mexican-American workers are employed in such jobs. Finally, workers in metro areas are likely to live in states with higher costs of living.

### Conclusions

Historically, relatively few Mexicans have settled in this part of the country. The last few years, however, have seen numerous communities, many of these in nonmetro locations, receive significant numbers of Mexican-origin newcomers. This is a phenomenon not unique to the South, for the dispersion of Mexicans has occurred throughout the country. Nevertheless, the South represents an interesting context for examining the experiences of Mexican newcomers for several reasons. First, a relatively high proportion of Mexicans live in nonmetro areas compared to Mexicans living in other regions of the country and second, the region has historically lagged behind other regions of the country in socioeconomic well-being. Indeed, the data used in the analysis are too dated to document the recent significant movement of Mexicans to the region, for the brunt of this movement has occurred after the completion of the 1990 census. Data from the 2000 should provide the information necessary to assess the fortunes of Mexican newcomers in the South, with the present study serving as a comparative base for the pre-Mexican migration period.

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David McGranahan Senior Economist with the Economic Research Service, USDA.

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of greater inequality between whites and Hispanics in 1998 than was the case a quarter-century before in 1973.

In sum, our results underscore the need to go beyond mere unemployment to get a complete appraisal of employment hardship in America. We found that underemployment is a significant problem in the South (as it is elsewhere), and is particularly apparent in the nonmetro South. We also found that Southern blacks and Hispanics are particularly likely to be underemployed, especially those living in the countryside. Over time, it seems that inequality between blacks and whites has eased somewhat, while that between Hispanics and whites has intensified. Much of our social and economic policy rests on the primacy of employment as a way to help families make ends meet and to help communities prosper. Our findings suggest that policy makers and rural development specialists in the South need to be aware of the underemployment that is often endured, and that this problem appears to be worse among rural residents and minorities.

Leif Jensen is Associate Professor of Rural Sociology at Pennsylvania State University.

Preparing an article for submission to *Southern Perspectives*? Please contact us prior to preparing your article so that we can provide you with a style sheet. The SRDC is endeavoring to make this publication conform to a basic format for numbers, capitalization, reference/endnote style, etc. Contact the Center at 601-325-3207 or [dcosper@srdc.msstate.edu](mailto:dcosper@srdc.msstate.edu) for a copy of the style sheet.

## Consortium membership provides information for land-grant faculty

Individuals who join the Southern Rural Development Consortium receive information about grant/contract opportunities. This Consortium also aids the SRDC in identifying individuals who have specialized rural development expertise (i.e. in labor markets, rural health, rural education, etc.). Because some information will be distributed by the Center in an electronic format only, Consortium membership has become extremely important.

As grant opportunities relevant to the priority issues of the SRDC present themselves, the list will make it easy to identify quickly the pool of social scientists in the South to work in partnership with the SRDC in the development and imple-

mentation of these grants. The Consortium is available to any land-grant faculty member with interest in rural development issues. This includes faculty in agricultural economics, rural sociology, youth development, human sciences, education, or other related disciplines.

To join the Southern Rural Development Consortium, complete a member profile form and return it to the Center. The form is available online at <http://www.ext.msstate.edu/srdc/grants/form.htm>. For more information about the Consortium or a paper copy of the form, contact the Center at 601-325-3207 or e-mail [dcosper@srdc.msstate.edu](mailto:dcosper@srdc.msstate.edu).

## Former alumni and student recruiting PR professional new SRDC editor

Vicksburg, Miss., native and Mississippi State University alumna Denise McDonald Cospers is the new publications editor for the Southern Rural Development Center.

Cospers comes to the Center from University Relations at Mississippi State where she wrote, edited, and coordinated all student recruiting publications for the university, which has an enrollment of nearly 16,000 students nationwide. She also edited and coordinated alumni publications and was the founding editor for *Mississippi State University Connection*, the university's publication for young alumni.

Cospers holds a bachelor's degree in communication management from Mississippi State and a master's degree in journalism from the University of Alabama.

In 1998, she received the Gold Award from the Admissions Marketing Report, Total Advertising Campaign, for her work with Leadership for the 21st Century, an image and student recruiting campaign for MSU. She is president of the Starkville/Mississippi State chapter of the Public Relations Association of Mississippi and is a member of the state board. She is the communication chair for the Oktibbeha County division of the American Heart Association and received the Special Communication Award from the American Heart Association Mississippi Affiliate in 1998.

Cospers currently is pursuing universal accreditation as a public relations professional as recognized by the Public Relations Society of America and other regional public relations groups.

## NAMES

### *in the News*

**Jimmy Cheek**, assistant dean of the University of Florida College of Agriculture since 1992, recently was named dean of the college and dean of academic programs for the university's Institute of Food and Agricultural Sciences. He succeeds **Larry Connor** who retired in January. Cheek received his bachelor's and doctoral degrees in agricultural and vocational education from Texas A&M University and his master's degree in guidance counseling from Lamar University.

**Margaret Hale**, former assistant director for family and consumer sciences with the Texas Agricultural Extension Service, recently was named executive associate director for administration for TAES and will manage the day-to-day operation of extension programs. **Bonnie McGee**, who has served as interim assistant director for urban programs with TAES since January, has been permanently appointed to the position and will coordinate programs among the six largest urban counties in Texas.

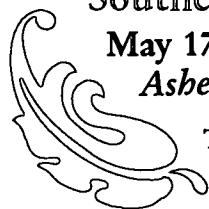
**Scott Smith**, former chair of the Department of Agronomy at the University of Kentucky, recently was named associate dean for research and associate director for the Kentucky Agricultural Experiment Station in the university's College of Agriculture. He succeeds **James Boling**, who recently was named vice chancellor for research for the Lexington Campus. Smith received his bachelor's and master's degrees from Cornell University and his doctorate from Michigan State University.

**Luther Waters**, former chair of the Department of Horticulture and Crop Science at The Ohio State University, is the new dean the Auburn University College of Agriculture and director of the Alabama Agricultural Experiment Station. He succeeds **James Marion**, who is stepping down to return to teaching and research at the university. Waters received bachelor's and master's degrees in horticulture from Clemson University and his doctorate from Oregon State University.

## Southern Region Community Development Institute

May 17-21

Asheville, N.C.



This conference is designed to provide extension specialists, regional directors, county agents, and paraprofessionals with a unique opportunity to be an active participant in an intensive, state-of-the-art training program related to community development.

Participants will gain an expanded understanding of the current nature of a

community's economic, social, and service infrastructure; the essential elements of sound community development extension programming; and tools and strategies for working with communities on economic, social, and service infrastructure enhancements.

Registration is limited the first 35 applicants. Participants may receive four continuing education credits (\$250) or three hours of graduate credit (\$400) from Mississippi State. For information about

graduate credit, contact the Division of Continuing Education at 601-325-2674.

The Institute will be held at Lutheridge Conference Center. Lodging cost is \$240 per person, single, or \$195 per person double, and includes meals and breaks.

Registration deadline is May 1. Contact the Southern Rural Development Center at Box 9656, Mississippi State, MS 39762, 601-325-3207, 601-325-8915, or [bonniet@srcd.msstate.edu](mailto:bonniet@srcd.msstate.edu).

**Southern Region Accountability Workshop**

April 12-14

Atlanta, Ga.

Two specific priority program areas will be addressed during this workshop—Nutrition and Parenting. Each state should bring a broad-based team consisting of county, district, and state faculty, a representative from communications; and an accountability/evaluation specialist.

The registration fee is \$65 per person and should be paid by March 29. The hotel reservation cut-off date also is March 29. Reserve a room by contacting Embassy Suites Atlanta Airport Hotel at 1-800-362-2779 or 404-767-1988. The room rate is \$85.84 and includes full cooked-to-order breakfast.

For more information, contact the Southern Rural Development Center at Box 9656, Mississippi State, MS 39762, 601-325-3207, 601-325-8915 (fax), or [bonniet@srcd.msstate.edu](mailto:bonniet@srcd.msstate.edu).

**Extension Water Quality Conference**

April 17-21

Raleigh, N.C.

This conference is designed to strengthen the capacity for extension to develop and deliver successful water quality, waste management, and natural resource programs by enhancing the cooperative working relations within extension. The conference offers four tracks.

The registration fee is \$100 and should be paid by March 17. Registrants after that date must pay \$150. The hotel reservation cut-off date is also March 17. Reserve a room by contacting the Sheraton Capitol Center Hotel at 919-834-9900. The room rate is \$75.

For more information, contact the Southern Rural Development Center at Box 9656, Mississippi State, MS 39762, 601-325-3207, 601-325-8915 (fax), or [bonniet@srcd.msstate.edu](mailto:bonniet@srcd.msstate.edu), or see the conference web site at <http://www5.bae.ncsu.edu/programs/extension/wqg/workshop/srcd/index.htm/>

**SERA-IEG 19 (Rural Health and Safety) Conference**

April 21-22

Black Mountain, N.C.

This conference is part of the Southern Extension Research Activity (SERA) Information Exchange Group (IEG) on Rural Health and Safety that meets on a ongoing basis to discuss issues of mutual interest. The primary focus of this conference will be community health issues.

Each participant must register with the Blue Ridge Mountain Assembly directly by paying a nonrefundable \$50 deposit by April 12. The conference package is \$176.75 per person and includes two nights lodging (single occupancy), meals, breaks, and program/facility fees. Double occupancy is \$116.75 per person.

To register, contact the YMCA Blue Mountain Assembly, 84 Blue Ridge Circle, Black Mountain, N.C. 28711, 828-669-8497, 828-669-8497 (fax), or [ymcabra@aol.com](mailto:ymcabra@aol.com). For additional conference information, contact Barbara K. Garland, 919-515-9149, 919-515-2786 (fax), [bgarland@amaroq.ces.ncsu.edu](mailto:bgarland@amaroq.ces.ncsu.edu), or Brenda Stone-Wiggins, 919-515-9140, 919-5155-2786 (fax), [Brenda\\_Stone-Wiggins@ncsu.edu](mailto:Brenda_Stone-Wiggins@ncsu.edu).





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## Kentucky extension professional newest SRDC board member

Paul Warner, assistant director for programs and staff development with the Kentucky Cooperative Extension Service, has joined the board of the Southern Rural Development Center for a three-year term. He replaces Chester Fehlis, associate vice chancellor and deputy director of the Texas Agricultural Extension Service, who completed his three-year term in December.

As administrator over program and staff development, Warner oversees programs, planning, personnel, and budgets for the KCES. Before accepting his current position, he was assistant director for rural development programs with the organization. He has been with the KCES for 25 years.

Warner received his bachelor's and master's degree in agricultural economics from Purdue University in 1966 and 1967,

respectively. He received his doctorate in rural sociology from The Ohio State University in 1972.

Warner is past president of the Community Development Society and has been selected as Outstanding Extension Sociologist by the Rural Sociology Society. He co-authored *The Cooperative Extension Service: A National Assessment*, a study about the public's perception of the cooperative extension programs around the country. He replicated the study in 1996 to determine how those perceptions had changed. He also is author of numerous journal articles.

Besides his work in extension, Warner spends his spare time woodworking and restoring antiques.

## SOUTHERN

## *Perspectives*

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